



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/380,412	01/19/2000	PATRIK LJUNGSTROEM	RIEB3.001APC	2586

20995 7590 04/16/2004

KNOBBE MARTENS OLSON & BEAR LLP
2040 MAIN STREET
FOURTEENTH FLOOR
IRVINE, CA 92614

EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT	PAPER NUMBER
----------	--------------

2686

DATE MAILED: 04/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/380,412

Applicant(s)

PATRICK LJUNGSTROEM

Examiner

Naghmeh Mehrpour

Art Unit

2686

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 2/5/04.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 12-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claim 26**, is rejected under 35 U.S.C. 103(a) as being unpatentable over Blanke et al.

(US Patent Number 6,615,035 B1) in view of Bacher et al. (US patent Number 5,617,467).

Regarding **Claim 26**, Blanke teaches a system for the operation of a mobile terminal of a mobile communication system with a base station that is connected to a public fixed network and that is compatible at an air interface with the mobile communication system that has at least one authentication function cordless communication system (page 2 section 0038) comprising:

transmitting a specific identification periodically from the base station to indicate presence and readiness for operation during a stand by mode (page 3 section 0052), wherein sections of data of the first identification module of the base station, wherein sections of data of the first identification module used in the base station are identical to sections of data on a second identification module of an access-authorized mobile terminal (page 3 section 0051, section 0055);

processing data read from the identification module through software implemented in the base station, so as to generate a first authentication result (mobile) (page 3 section 0047, section 0055);

Art Unit: 2686

processing data read from the second identification module (base station), generated at the base station, so as to generate a second authentication result (page 3 section 0051, section 0055);

authenticating the mobile terminal with regard to the base station through the first authentication result (mobile) and the second authentication result (base station), wherein the base station fulfills an access-authorized mobile terminal (page 3 section 0049); and software implemented in the base station for processing of data read from the identification module and for authenticating the mobile terminal relative to the base station through the processed data (page 3 section 0046), wherein the base station fulfills the same functions and tasks with respect to access control and authentication as the home location register (page 3 section 0055), and respectively, the authentication center of the mobile communication system, and **wherein the authentication is performed without accessing a home location register in a mobile communication system (page 3 section 0051).**

Blanke fails to teach a read/write unit within a base station which is configured to read and write information from and to and processing data read from the identification module through software implemented in the base station. However Bacher teaches a read/write unit within a base station configured to read and write information from and to, and processing data read from the identification module through software implemented in the base station (see figure 1, read/write memory col 5 lines 45-55). Using readable/writable memory instead of readable memory within the base station, provides more variety to the user, for example enabling the user to use multiple handsets with one base. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Bacher with Blanke

Art Unit: 2686

cordless Base Station, in order to provide more flexibility for the wireless communication system.

3. **Claims 12-20, 22, 23-25, 27**, are rejected under 35 U.S.C. 103(a) as being unpatentable over Blanke et al. in view of Yahagi (US Patent Number 5,642,401) in further view of Bacher et al. (US Patent Number 5,617,467).

Regarding **Claims 12-13, 20**, Blanke teaches a cordless communication system for the operation of a mobile terminal of a mobile communication system with a base station that is connected to a public fixed network and that is compatible at an air interface with the mobile communication system that has at least one authentication function cordless communication system (page 2 section 0038) comprising:

at least one a first identification module (base station), wherein sections of data of the identification module through, wherein the section of the first identification module (mobile) used in the base station is identical to the section of a second identification module (base station) of an access-authorized mobile terminal (page 3 section 0047, section 0052);

authenticating the mobile terminal with regard to the base station through the first authentication result and the second authentication result (page 3 section 0049);

wherein the base station fulfills the same functions and tasks with respect to access control and authentication as the home location register (page 3 section 0055), and respectively, the authentication center of the mobile communication system (page 3 section 0052), and **wherein the authentication is performed without accessing a home location register in a mobile communication system (see figure 6, page 3 section 0052).**

Art Unit: 2686

Blanke fails to teach using a random number generated at the base station, so as to generate the authentication result.

Yahagi teaches the base station generates a random number generated, as to generate the authentication result (col 3 lines 60-67, col 4 lines 1-5, col 4 lines 26-35, col 5 lines 30-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Yahagi with Blanke cordless Base Station, in order to provide authentication method which does not require any means for storing an authentication random number corresponding each mobile station and also provide an advance authentication calculation result.

The combination of Blanke and Yaghagi does not specifically mention a read/write unit exists within the base station configured to read and write information from/to, and processing data read from the identification module through software implemented in the base station.

However Bacher teaches a read/write unit within a base station, is configured to read/write information from/to, and processing data read from the identification module through software implementing in the base station (col 5 lines 45-55). Using readable/writable memory instead of readable memory within the base station, provides more variety to the user, for example enabling the user to use multiple handsets with one base. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Bacher with Blanke cordless Base Station modified by Yaghagi, in order to provide more flexibility for the wireless communication system.

Regarding **Claim 14**, Blanke teaches a method further comprising storing other data on the identification module and the other data including allowed frequencies, a maximum permitted

Art Unit: 2686

output powers for the base station and the mobile terminal, allowed services, and initialization parameters which a network carrier desires to influence and which constitute a general framework for the operation of the base station of the cordless communication system (page 3 section 0043).

Regarding **Claims 15-16**, Blanke teaches a method comprising operating the base station of the cordless communication system so that the air interface operates in a frequency spectrum of a public mobile communication system (page 3 section 0055).

Regarding **Claims 17-19**, Blanke teaches a method of communication that comprise a timer within the base station to a predetermined time by a network carrier, and automatically resetting the timer by a subscriber if an authorized use occurs, wherein the base station, if not used after the predetermined time has lapsed, loses authorization to operate a transmitter at frequencies assigned to the mobile communication system (page 3 section 0049, section 0052).

Regarding **Claim 21**, Blake teaches that the wireless communication system wherein the identification module is a chip card configured for a predetermined standard (page 3 section 0047).

Regarding **Claim 22**, the combination of Blanke modified by Yahagi and Bacher fails to teach a cordless communication system wherein the predetermined standard is selected from the group consisting of ISO ID-1, ID-000, DCS 1800, and PCS 1900. However Examiner takes official notice that a cordless communication system wherein the predetermined standard is selected from the group consisting of ISO ID-1, ID-000, DCS 1800, and PCS 1900 is well known in the art. Therefore, it have been obvious to one of ordinary skill in the art at the time of the invention

Art Unit: 2686

to use above teaching to the combination of Blanke modified by Yahagi and Bacher, in order to provide a system that can be operational with in a variety of different networks.

Regarding **Claims 23-24**, Blanke teaches an apparatus/method of a cordless communication system wherein the mobile identification module is a chip card (page 3 section 0047).

Regarding **claim 25**, Blanke teaches a cordless communication system for the operation of a mobile terminal of a mobile communication system with a base station that is connected to a public fixed network and that is compatible at an air interface with the mobile communication system that has at least one authentication function cordless communication system (page 2 section 0038) comprising:

authenticating the mobile terminal with regard to the base station through the first and the second authentication result such that the mobile terminal authenticates directly with the base station, wherein the base station fulfills the same functions and tasks with respect to access control and authentication as a home location register and, respectively, and authentication center of the mobile communication system (page 3 section 0055), and

operating the mobile through the public fixed network if the authentication has been successful, and **wherein the authentication is performed without accessing a home location register in a mobile communication system (page 3 section 0055).**

Blanke fails to teach the base station generates a random number, so as to generate the authentication result;

a first identification module (mobile), wherein a secret key is stored on the first identification module and a second identification module of an access-authorized mobile terminal.

Art Unit: 2686

However Yahagi teaches using a random number generated at the base station, so as to generate the authentication result (col 4 lines 60-67, col 5 lines 1-5; and

a first identification module (mobile), wherein a secret key is stored on the first identification module (base station) and a second identification module (mobile) of an access-authorized mobile terminal (col 3 lines col 4 lines 14-35, col 5 lines 30-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Yahagi with Blanke cordless Base Station, in order to provide authentication method which does not require any means for storing an authentication random number corresponding each mobile station and also provide an advance authentication calculation result. The combination of Blanke and Yaghagi does not specifically mention a read/write unit exists within a base station configured to read and write information from/to, and processing data read from the identification module through software implemented in the base station.

However Bacher teaches a read/write unit within a base station configured to read/write information from/to, and processing data read from the identification module through software implemented in the base station (col 5 lines 45-55). Using readable/writable memory instead of readable memory within the base station, provides more variety to the user, for example enabling the user to use multiple handsets with one base. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Bacher with Blanke cordless Base Station modified by Yogi, in order to provide more flexibility for the wireless communication system.

Regarding **claim 27**, Blanke teaches a system for the operation of a mobile terminal of a mobile communication system with a base station that is connected to a public fixed network and that is

Art Unit: 2686

compatible at an air interface with the mobile communication system that has at least one authentication function cordless communication system (page 2 section 0038) comprising:

transmitting a specific identification periodically from the base station to indicate presence and readiness for operation during a stand by mode (page 3 section 00525), wherein sections of data of the first identification module of the base station, wherein sections of data of the first identification module used in the base station are identical to sections of data on a second identification module of an access-authorized mobile terminal (page 3 section 0051);

reading from a first subscriber identity module (SIM) card through the base station, wherein sections data of the first SIM used in the base station are identical to sections of data stored on a second SIM card of an access authorized mobile terminal (page 3 section 0047);

processing data read from the first SIM card through software implemented in the base station to generate a first authentication result (page 3 section 0049, section 0051, section 0055);

authenticating the mobile terminal with regard to the base station through the first authentication result (mobile) and the second authentication result (base station), wherein the base station fulfills an access-authorized mobile terminal (page 3 section 0049), wherein the base station fulfills the same functions and tasks with respect to access control and authentication as a home register and, wherein the base station fulfills the same functions and tasks with respect to access control and authentication as the home location register (page 3 section 0055), and respectively, the authentication center of the mobile communication system **wherein the authentication is performed without accessing a home location register in a mobile communication system (page 3 section 0051); and**

Art Unit: 2686

operating the mobile terminal through the public fixed network if the authentication has been successful (page 3 section 0051).

Blanke fails to teach that the base station generates a random number, for the purpose of generating the authentication results. However, Yahagi teaches a base station which generates a random number to generate the authentication results (col 3 lines 60-67, col 4 lines 1-4); and

processing data read from the second SIM card, using the random number generated at the base station (col 4 lines 14-35, col 5 lines 30-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Yahagi with Blanke cordless Base Station, in order to provide authentication method which does not require any means for storing an authentication random number corresponding each mobile station and also provide an advance authentication calculation result.

The combination of Blanke modified by Yahagi, does not specifically mention a read/write unit exists within the base station, is configured to read and write information from and to the processing data read from the identification module through software implemented in the base station.

However Bacher teaches a read/write unit within the base station is configured to read and write the information from and to, and processing data for the identification module through software implemented in the base station (col 5 lines 45-55). Using readable/writable memory instead of readable memory within the base station, provides more variety to the user, for example enabling the user to use multiple handsets with one base. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the above teaching of Bacher with

Art Unit: 2686

Blanke cordless Base Station modified by Yahagi, in order to provide more flexibility for the wireless communication system.

Conclusion

4. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

5. **Any responses to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308--6296, (for formal communications indented for entry)

Or:

(703) 308-6306, (for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Art Unit: 2686

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, Va., sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Melody Mehrpour whose telephone number is (703) 308-7159. The examiner can normally be reached on Monday through Thursday (first week of bi-week) and Monday through Friday (second week of bi-week) from 6:30 a.m. to 5:00 p.m.

If attempt to reach the examiner are unsuccessful the examiner's supervisor, Marsha Banks-Harold be reached (703) 305-4379.

NM

March 29, 2004

Marsha D Banks-Harold
MARSHA D. BANKS-HAROLD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600